

CLAIMS

The following provides the listing of the claims, as previously presented and currently pending in the present application.

1-21. (Canceled)

22. (Previously Presented) A syringe driver assembly for imparting translational movement to a syringe plunger, comprising:

- a. a motor driven unthreaded shaft,
- b. at least one bearing mounted obliquely to the shaft and having at least one point of contact therewith, and
- c. an actuator linked to at least one of the bearings for contacting a thumbplate of the plunger, wherein rotation of the shaft causes movement of the actuator-linked bearing along the shaft to affect movement of the actuator.

23. (Previously Presented) The syringe driver assembly of claim 22 wherein there is but a single bearing and the shaft is supported by a rotary member at least one point along the length.

24. (Previously Presented) The syringe driver assembly of claim 23 wherein the rotary member is on an opposite side of the shaft relative to the contact point of the bearing.

25. (Previously Presented) The syringe driver assembly of claim 22 wherein at least three bearings are provided with alternate bearings being mounted at the same angle relative to the shaft and adjacent bearings being mounted at an opposing angle relative to the shaft.

26. (Previously Presented) The syringe driver assembly of claim 25 wherein each bearing has a bore through which the shaft passes, with the bore being larger than the shaft outer circumference.

27. (Previously Presented) The syringe driver assembly of claim 26 wherein the bearing has a pointed inner profile.
28. (Previously Presented) The syringe driver assembly as claimed in claim 26 wherein the bearing has a flat inner profile with a chamfered inner race.
29. (Previously Presented) The syringe driver assembly of claim 28 wherein each bearing is angled with respect to the shaft such that it contacts the shaft at least two points.
30. (Previously Presented) The syringe driver assembly of claim 29 wherein three bearings are provided, with one of the outer bearings and the other of the outer bearing and the central bearing contacting the bottom of the shaft and the central bearing contacting the top of the shaft.
31. (Previously Presented) The syringe driver assembly claim 30 wherein the angle of inclination of each bearing relative to the shaft is less than 45 degrees.
32. (Previously Presented) The syringe driver assembly of claim 25 wherein the inclined bearings are symmetrically spaced in one plane perpendicular to the shaft axis and the outer races of the bearings make radial contact with the shaft.
33. (Previously Presented) The syringe driver assembly of claim 32 wherein the bearing is spring loaded.
34. (Previously Presented) The syringe driver assembly of claim 33 wherein the bearing is housed within a carriage that is moveable with respect to the shaft.
35. (Previously Presented) The syringe driver assembly of claim 33 wherein the carriage is connected to the actuator.
36. (Previously Presented) The syringe driver assembly of claim 35 wherein the carriage is provided with guides.

37. (Previously Presented) The syringe driver assembly of claim 36 further comprising means for manually disengaging at least one bearing to enable sliding movement independently of the shaft.
38. (Previously Presented) The syringe driver assembly of claim 37 wherein at least one bearing is spring-loaded with respect to the shaft and operation of the spring mechanism disengages that bearing from the shaft.
39. (Previously Presented) The syringe driver assembly of claim 37 wherein manual disengagement is affected by movement of a housing containing a bearing in a direction transverse to the shaft to lift the bearing from the shaft.
40. (Previously Presented) The syringe driver assembly of claim 39 further comprising a cam and lever for lifting the bearing from the shaft.
41. (Previously Presented) The syringe driver assembly of claim 22 further comprising automatic means for reversing direction of travel of the bearings and actuator along the shaft.
42. (Previously Presented) The syringe driver assembly of claim 41 wherein the bearing including adjustable biasing means.